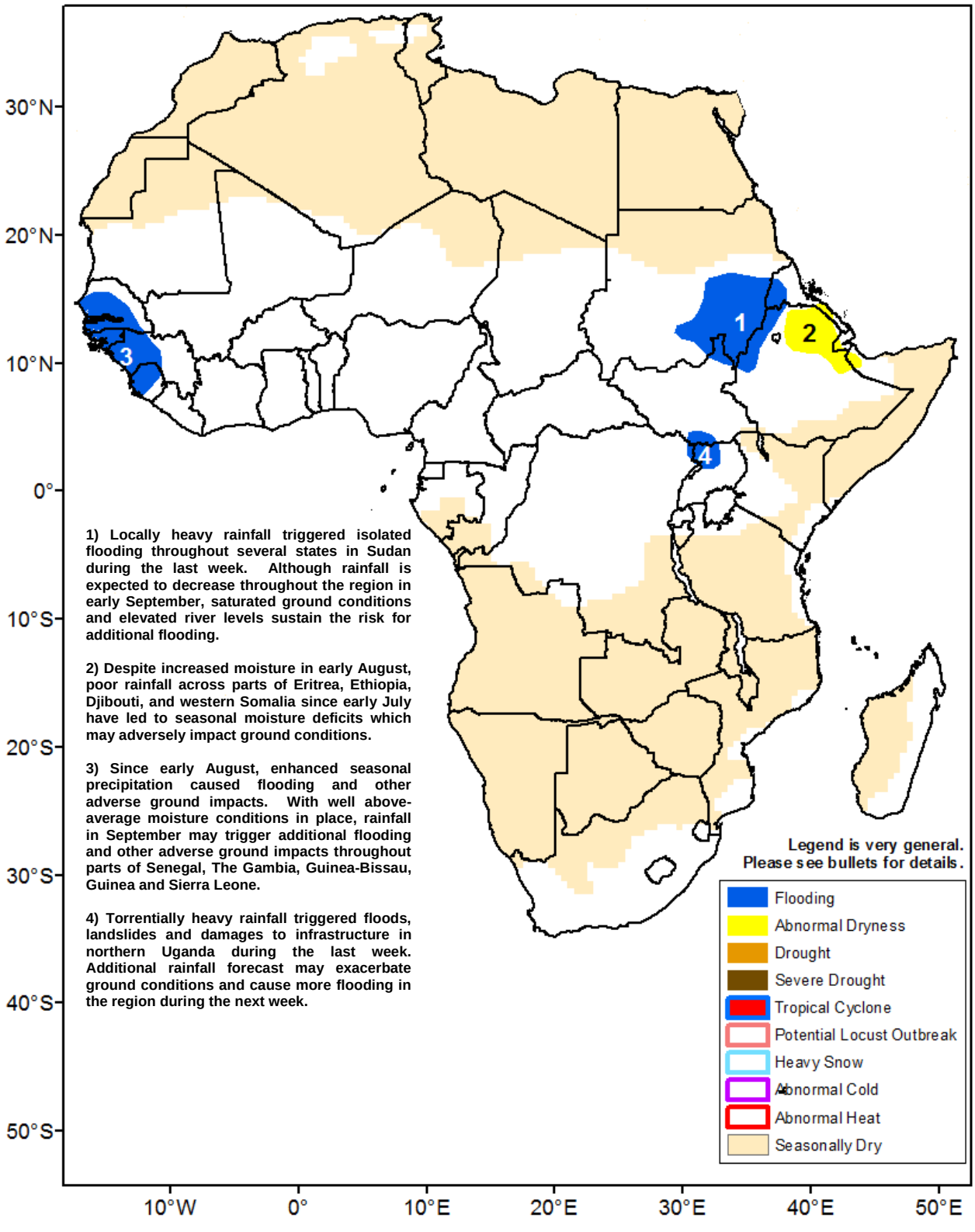
Climate Prediction Center's Africa Hazards Outlook
August 31 – September 6, 2017

- **Heavy rains, floods affect several regions in Sudan during late August.**



1) Locally heavy rainfall triggered isolated flooding throughout several states in Sudan during the last week. Although rainfall is expected to decrease throughout the region in early September, saturated ground conditions and elevated river levels sustain the risk for additional flooding.

2) Despite increased moisture in early August, poor rainfall across parts of Eritrea, Ethiopia, Djibouti, and western Somalia since early July have led to seasonal moisture deficits which may adversely impact ground conditions.

3) Since early August, enhanced seasonal precipitation caused flooding and other adverse ground impacts. With well above-average moisture conditions in place, rainfall in September may trigger additional flooding and other adverse ground impacts throughout parts of Senegal, The Gambia, Guinea-Bissau, Guinea and Sierra Leone.

4) Torrentially heavy rainfall triggered floods, landslides and damages to infrastructure in northern Uganda during the last week. Additional rainfall forecast may exacerbate ground conditions and cause more flooding in the region during the next week.

No relief to heavy rains reported over western Sahel.

According to latest satellite rainfall estimates, another week of widespread heavy precipitation was received across much of the western Sahel. The highest weekly accumulations (>150mm) were observed over western Sierra Leone, Guinea, Guinea-Bissau and southern Senegal (**Figure 1**). Compared to previous several weeks, a significant increase in weekly rainfall was received over some anomalously dry areas of northern Senegal, southern Mauritania and western Mali. Further east, lesser but well distributed seasonal rains were registered over Burkina Faso, Niger and Nigeria. Towards the south, several Gulf of Guinea countries began to experience a slight increase in precipitation during the last week. These rains are associated with the seasonal equatorward withdrawal of the ITCZ/ITF in West Africa.

Following a period in early to mid-August which saw a general decrease in seasonal rainfall, which had led to strengthening moisture deficits over several regions of West Africa, this past week's rainfall distribution helped to considerably improve mid-season dryness in those regions. In parts of southwestern Mali, northern Burkina Faso and western Niger, greater rainfall totals in late August have nearly offset negative moisture anomalies. Since late July, a few local areas in these regions are experiencing less than 80 percent of their normal accumulation, with largely near-normal to above-normal conditions being depicted elsewhere across the Sahel. However, large moisture surpluses continue to strengthen mainly across the western Sahel, where parts of Senegal and Guinea have experienced more than twice their normal rainfall accumulation since late July (**Figure 2**). The continuation of heavy seasonal rains in these areas elevates the risk for floods and other adverse ground impacts into September.

During the next outlook period, precipitation models suggest the potential for decreased rainfall across the western Sahel, with enhanced amounts across central and eastern Sahel region.

Locally heavy rains trigger floods throughout Sudan and Uganda.

The second consecutive week of enhanced rainfall over Sudan has reportedly resulted in floods, damages to infrastructure, and displaced populations over the North Darfur, South Darfur, Northern, Sennar and Khartoum states of Sudan. The onset of torrential rainfall over Uganda also triggered floods, landslides and damages to infrastructure over the northern and western region of Uganda. Increased rains across many regions in East Africa over the past few weeks have resulted in average to above-average precipitation since late July (**Figure 2**).

For the upcoming outlook period, a decrease in the amount and extent of seasonal rainfall is forecast over eastern Sudan, which is expected to provide relief to saturated ground conditions. However, moderate to heavy rainfall over western Ethiopia is expected to sustain the risk for downstream river basin inundation along the Nile River basin.

7-Day Satellite Estimated Rainfall (mm)
Valid: August 21 – August 27, 2017

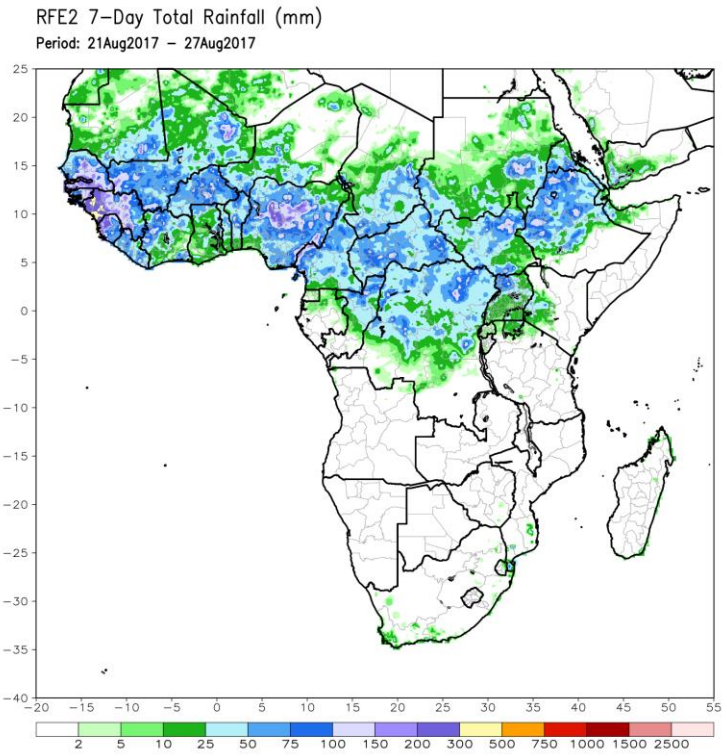


Figure 1: NOAA/CPC

30-Day Satellite-Estimated Rainfall Anomaly (mm)
Valid: July 29 – August 27, 2017

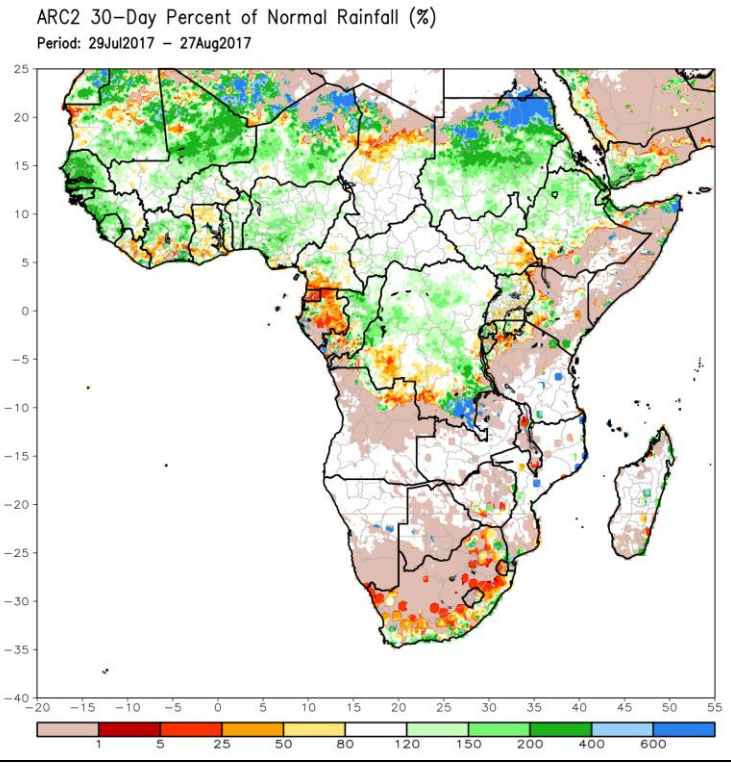


Figure 2: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.